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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,709	09/30/2004	Ronald James Versic	D-00002-10	5708
25179	7590	12/05/2006		
A PATENT LAWYER CORP, PC R WILLIAM GRAHAM 22 S ST CLAIR ST DAYTON, OH 45402			EXAMINER NGUYEN, KIMBERLY D	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/711,709

Applicant(s)

VERSIK ET AL.

Examiner

Kimberly D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/3/04, 9/30/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 1-5 are objected to because of the following informalities:

Regarding claim 1, the phrase "such that", on line 4, renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al. (US 6,160,526; hereinafter "Hirai") in view of Green et al. (US 6,951,596; hereinafter "Green").

Hirai teaches a method of making an RFID device (IC card has antenna coil 3 for transmitting and receiving radio/electromagnetic waves; col. 5, lines 46+), which includes the steps of:

(a) applying an adhesive (50 in fig. 4; col. 6, lines 10-12) having electrically conductive particles (51) therein to a pair of laterally displaced landing sites (terminals 10a and 10b are connected with the starting end and terminating end, respectively, of the antenna 3 (col. 5, lines 52)) of an antenna formed on a flexible substrate/web (1) in a manner that the particles remain spatially positioned from one another (see figs. 3-4; col. 5, line 26 through col. 6, line 67),

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(b) bringing a pair die pads (electrodes 20 in fig. 4) of a die (IC chip 2) into sufficient electrical contact with the landing sites (10a, 10b) to effect a Z axis conductivity through the particles between a respective die pad and landing site pad pair while precluding X-Y conductivity between the landing site pads (“...As a result, an electrical conduction is provided only between each of the electrodes 20 and a respective one of the terminals 10a, 10b...” col. 6, lines 5-24), and

(c) heat/high-temperature irradiating of the adhesive in a manner to cure the adhesive joining the die to the antenna (col. 10, lines 30-51; col. 12, lines 49-67).

Hirai fails to specifically teach the adhesive is a UV curable adhesive; heat irradiating is UV irradiating.

Green teaches an RFID label having the step of bonding the electrical connectors of the chip, the antennas, and web stock by using heat and/or actinic radiation such as UV radiation (col. 12, line 66 through col. 13, line 5); wherein “Methods for curing adhesives are known in the art and, by way of example and not limitation, include heat curing, UV, and infrared curing methods.” (col. 15, lines 65-67)

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a UV curable adhesive, UV irradiating as taught by Green to replace/modify the heat curable adhesive and heat irradiating as taught by Hirai in order employ a bonding process using UV curable adhesive, UV irradiating. Such modification would have been an obvious expedient from Harai in view of Green.

Re claim 2: Particles 51 are metallic coated spheres (see fig. 4; col. 6, lines 10-14).

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4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai as modified by Green as applied to claim 1 above, and further in view of Yoshihara et al. (DE 1995711 A1; hereinafter "Yoshihara"). The teachings of Hirai as modified by Green have been discussed above.

Hirai as modified by Green fails to specifically teach wherein step (c) to include introducing an inert gas into an area surrounding an exposed portion of the adhesive.

Yoshihara teaches a semiconductor component comprises a wafer (1) with an attached adhesive foil (2, 7); wherein the adhesive foil comprises a first adhesive foil; wherein the first adhesive foil is applied to the wafer under vacuum or inert gas and is exposed to UV in the specific region using a mask which may be used for positioning and for pressing the first adhesive foil on the wafer (see Abstract; specifically the last 5 lines).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate inert gas as taught by Yoshihara to the teachings of Hirai as modified by Green in order to bond the adhesive on the wafer.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly D. Nguyen whose telephone number is 571-272-2402.

The examiner can normally be reached on Monday-Friday 7:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly D. Nguyen
Primary Examiner
Art Unit 2876



December 2, 2006